

The pages in this document were taken from the "Corsica River Watershed Restoration Action Strategy: Final Report" published in September 2004. The entire document can be found at [http://dnrweb.dnr.state.md.us/download/bays/cr\\_strategy.pdf](http://dnrweb.dnr.state.md.us/download/bays/cr_strategy.pdf).

# Corsica River Watershed Restoration Action Strategy: Final Report

## **Excerpt Showing an Example of Benthic Macroinvertebrate Sampling**

**September 2004**

## **Benthic Macroinvertebrate Sampling**

Aquatic macroinvertebrates were collected at the time of water chemistry samples during the spring to be within the Maryland Biological Stream Survey (MBSS) spring index period. Macroinvertebrate collections were made over a 2m<sup>2</sup> area of the best available habitat using a 0.3m wide dip net with a mesh size of 500 microns. The best available habitats include: gravel riffles, snags, submerged vegetation and root mats. Habitats were sampled in the proportion to their occurrence at the station. Samples were composited in a sieve bucket, fine sediments washed out, and large debris rinsed and discarded. The remaining sample was preserved in 70% ethanol and returned to the laboratory for sub-sampling. Sub-sampling was done using a gridded tray. Grids were chosen at random until the 100<sup>th</sup> organism had been completed. Organisms were identified to genus, recorded on a bench sheet, and archived for future reference. *In situ* water quality data (dissolved oxygen, pH, conductivity, temperature) were collected during each sampling episode with a Hydrolab Surveyor II®. A macroinvertebrate index of biotic integrity (IBI) (MD DNR, 1998) was calculated to facilitate ranking of site quality.